

**Note to readers with disabilities:** *EHP* strives to ensure that all journal content is accessible to all readers. However, some figures and Supplemental Material published in *EHP* articles may not conform to [508 standards](#) due to the complexity of the information being presented. If you need assistance accessing journal content, please contact [ehp508@niehs.nih.gov](mailto:ehp508@niehs.nih.gov). Our staff will work with you to assess and meet your accessibility needs within 3 working days.

## **Supplemental Material**

### **Urbanization Level and Vulnerability to Heat-Related Mortality in Jiangsu Province, China**

Kai Chen, Lian Zhou, Xiaodong Chen, Zongwei Ma, Yang Liu, Lei Huang, Jun Bi, and  
Patrick L. Kinney

#### **Table of Contents**

**Table S1.** The pooled cumulative relative risk of mortality (95% PI) at 32·27°C (mean 99th percentile for 102 counties) relative to 24·13°C (mean 75th percentile) by varying modelling choices in Jiangsu, 2009-2013.

**Table S2.** Spatial autocorrelation analysis of residuals of heat-related mortality risks after linear regression on heat vulnerability index using Global Moran's I statistic.

**Figure S1.** Distribution of 24 weather stations and 102 studied counties in Jiangsu, China.

**Figure S2.** Density scatter plot of 10-fold cross-validation of interpolated daily temperatures in 792 stations of China, 2009-2013. (A), (B), and (C) are cross-validation results for interpolated daily mean, maximum, and minimum temperatures, respectively. The color scale of this scatter density plot represents the number of data counts in a pixel in the plot. Results of model fitting were also presented. MPE: mean prediction error (°C); RMSE: root mean squared prediction error (°C); RPE: relative prediction error (%). The dashed line is the 1:1 line.

**Figure S3.** Relationship between heat-related mortality risk and heat vulnerability index in 102 counties of Jiangsu Province, China: (A) total mortality; (B) cardiovascular mortality. County-specific estimates of the overall cumulative total mortality risk at 32·27 °C vs. 24·13 °C were plotted against the county-specific heat vulnerability index scores. The solid lines show the estimated linear associations, and the shaded bands denote 95% Confidence Intervals. Results of Pearson correlation are also presented.

**Figure S4.** Heat vulnerability index, percentage of urban population, and cardiorespiratory mortality risk for 102 counties in Jiangsu, China. The color and size scale of this scatter plot represents the heat-related cardiorespiratory mortality risk for each county.